

Vocabulary

Chemical reaction

Chemical change (new material is formed)

Vs

physical change (same material or substance)

reactants → products (different from reactants - new material is formed)

direction of reaction

precipitate (Solid from two liquids)

Chemical reaction

indications of chemical reaction (new material is formed)

- Change of Color
- formation of gas
(bubbles, smell, smoke)
- Change in temperature
(exothermic, endothermic)
- formation of precipitate

rate of reaction

Catalyst-enzymes

surface area

Concentration

temperature

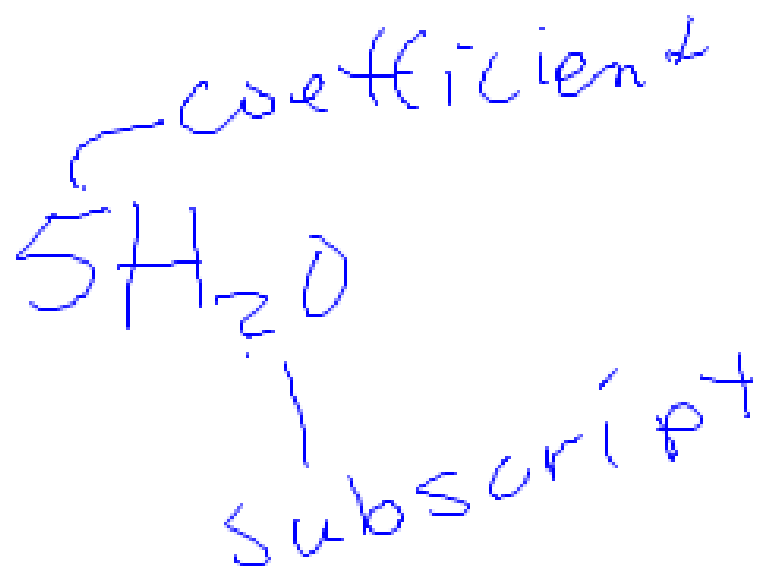
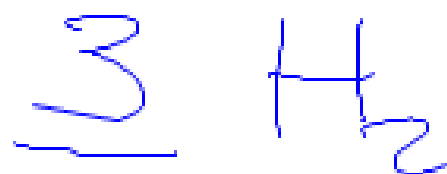
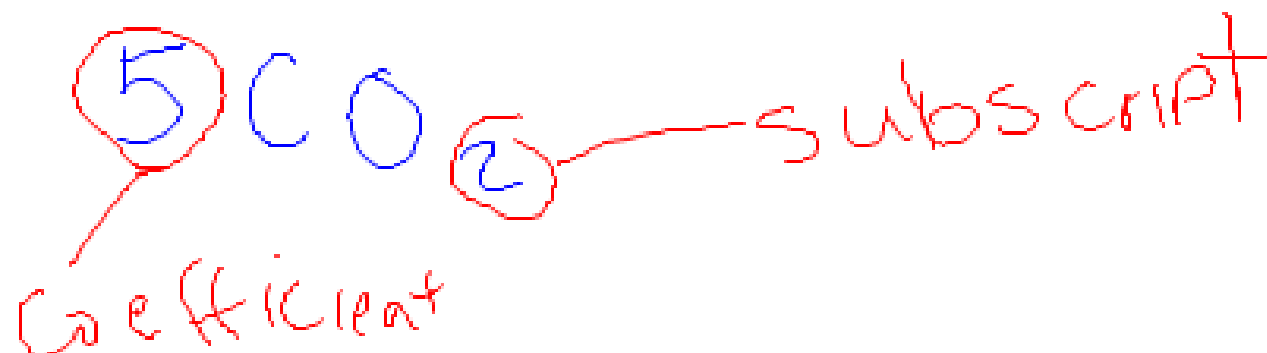
law of conservation of mass

mass is not created or destroyed in a chemical reaction

mass of reactants = mass of products
same amounts of the same atoms in
reactants and products

Coefficient

number in front of an atom or compound



arrow is direction of reaction

chemical
types of reactions

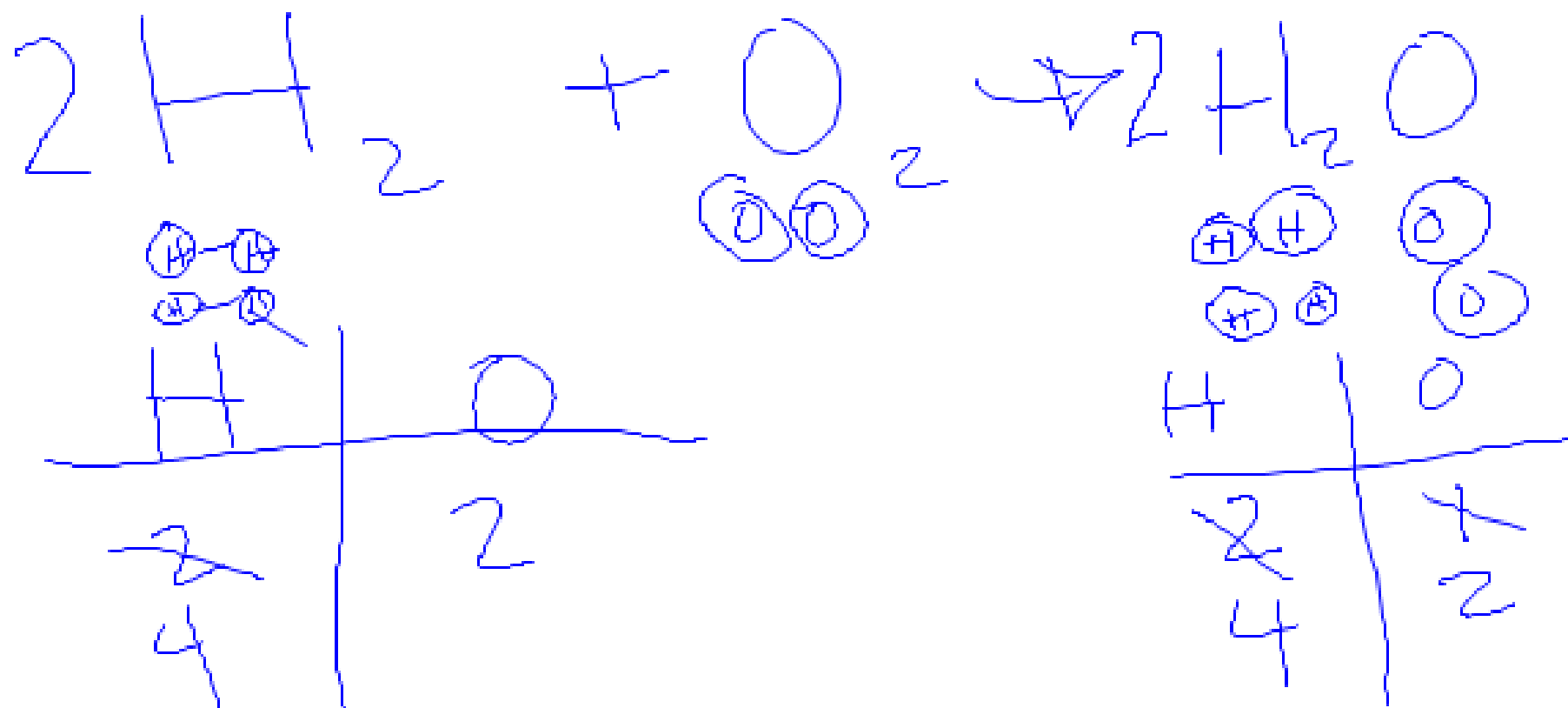
Combustion reaction- involves oxygen

decomposition- $2\text{H}_2\text{O} \longrightarrow 2\text{H}_2 + \text{O}_2$

synthesis - $2\text{H}_2 + \text{O}_2 \longrightarrow 2\text{H}_2\text{O}$

endothermic

exothermic



review p. 81-83 on
balancing equations

Classzone.com
Content review

bond energy

make bonds-releases energy

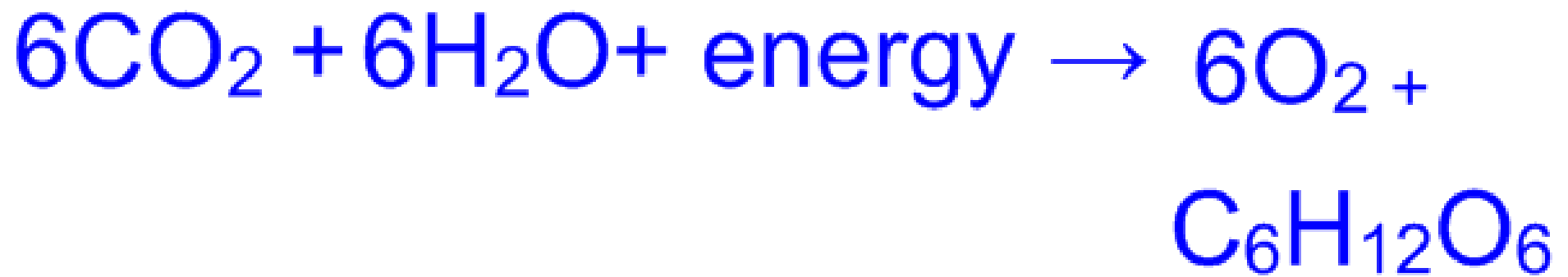
break bonds-absorbs energy

Exothermic-net product releases energy

Endothermic-energy net product absorbs energy

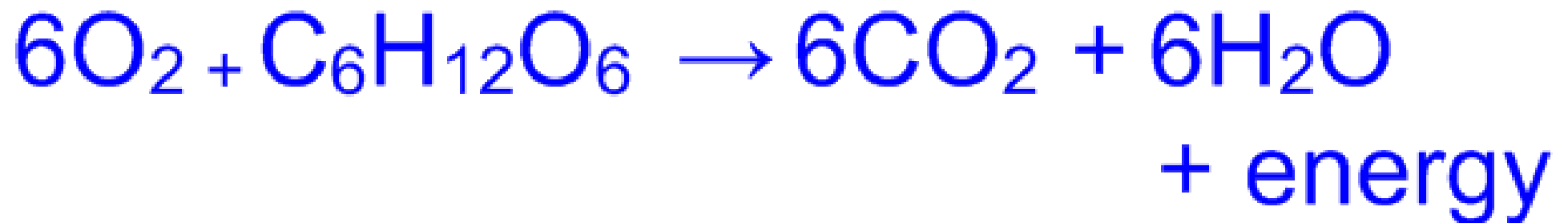
photosynthesis-

Carbon dioxide + water + energy \rightarrow oxygen + glucose(sugar)



respiration

Oxygen + glucose \longrightarrow carbon dioxide + water + energy



catalytic converters

P 97

silicon & photoresist
microchips

P 98 & 99